

इंटरनेट

मानक

### Disclosure to Promote the Right To Information

Whereas the Parliament of India has set out to provide a practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority, and whereas the attached publication of the Bureau of Indian Standards is of particular interest to the public, particularly disadvantaged communities and those engaged in the pursuit of education and knowledge, the attached public safety standard is made available to promote the timely dissemination of this information in an accurate manner to the public.

“जानने का अधिकार, जीने का अधिकार”

Mazdoor Kisan Shakti Sangathan

“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

“Step Out From the Old to the New”

IS 4966-2 (1969): Gauges for Serrations, Part II: For Gauging Internal Serrations [PGD 25: Engineering Metrology]



“ज्ञान से एक नये भारत का निर्माण”

Satyanarayan Gangaram Pitroda

“Invent a New India Using Knowledge”



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”



BLANK PAGE



**IS : 4966 ( Part II ) - 1969**

**( Reaffirmed 1988 )**

# *Indian Standard*

## **SPECIFICATION FOR GAUGES FOR SERRATIONS**

### **PART II FOR GAUGING INTERNAL SERRATIONS**

**( Third Reprint AUGUST 1990 )**

UDC 621'753'3 : 621'824'44

© *Copyright* 1969

**BUREAU OF INDIAN STANDARDS  
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG  
NEW DELHI 110002**

# Indian Standard

## SPECIFICATION FOR GAUGES FOR SERRATIONS

### PART II FOR GAUGING INTERNAL SERRATIONS

Transmission Devices Sectional Committee, EDC 44

*Chairman*

SHRI L. N. TANDON

*Representing*

Tata Engineering & Locomotive Co Ltd,  
Jamshedpur

*Members*

SHRI KARTAR SINGH ( <i>Alternate to</i> Shri L. N. Tandon )	
SHRI R. S. BIR	Hindustan Machine Tools Ltd, Bangalore.
SHRI M. RANGASHAI ( <i>Alternate</i> )	
DEPUTY DIRECTOR STANDARDS ( DP )	Research, Designs & Standards Organization ( Ministry of Railways ), Lucknow
ASSISTANT DIRECTOR STANDARDS ( DP ) ( <i>Alternate</i> )	
SHRI M. B. DHAVALE	Indian Diesel Engine Manufacturers' Association, Poona
SHRI S. K. JOSHI ( <i>Alternate</i> )	
SHRI VINAYAK MAHADEO GADRE	Gadre Brothers, Madhavnagar
SHRI GOPAL MAHADEO GADRE ( <i>Alternate</i> )	
SHRI P. L. JAIN	Jyoti Limited, Baroda
SHRI GIRISHBHAI C. PATEL ( <i>Alternate</i> )	
SHRI V. R. KRISHNAMURTHY	Tube Investments of India Ltd, Madras
SHRI M. L. KUMAR	Ministry of Defence ( DGI )
SHRI RAM SINGH ( <i>Alternate</i> )	
SHRI D. MASCARENHAS	David Brown Greaves Ltd, Poona
SHRI M. NAGARAJ ( <i>Alternate</i> )	
SHRI J. V. RAGHAVAN	New Allenberry Works, Calcutta
SHRI S. SHANMUGAM	Southern Industrial Corporation Ltd, Madras
SHRI N. C. SUKHARAMWALA	The Mysore Kirloskar Ltd, Harihar
SHRI V. VENKATARAMAN	Greaves Cotton & Co Ltd, Bombay
SHRI S. V. MANI ( <i>Alternate</i> )	
SHRI D. S. M. VISHNU	Heavy Electricals ( India ) Ltd, Bhopal
SHRI M. V. PATANKAR, Director ( Mech Engg )	Director General, ISI ( <i>Ex-officio Member</i> )

*Secretary*

SHRI C. V. RAVINDRAN  
Assistant Director ( Mech Engg ), ISI

( Continued on page 2 )

**BUREAU OF INDIAN STANDARDS**  
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG  
NEW DELHI 110002

## **IS : 4966 ( Part II ) - 1969**

*( Continued from page 1 )*

### **Splines and Serrations Subcommittee, EDC 44 : 4**

#### *Condenser*

**SHRI R. S. BIR**

#### *Representing*

**Hindustan Machine Tools Ltd, Bangalore**

#### *Members*

**SHRI M. RANGASHAI ( Alternate to**

**Shri R. S. Bir )**

**CHIEF ENGINEER**

**Heavy Electricals ( India ) Ltd, Bhopal**

**SHRI K. RAMANATHAN ( Alternate )**

**SHRI D. C. KOHLI**

**Hindustan Motors Ltd, Calcutta**

**SHRI K. S. MINHAS**

**Automobile Products of India Limited, Bombay**

**SHRI J. V. RAGHAVAN**

**New Allenberry Works, Calcutta**

**SHRI K. SURYANARAYANA RAO**

**Ashok Leyland Limited, Madras**

**SHRI G. K. RUIKAR**

**The Mysore Kirloskar Ltd, Harihar**

# *Indian Standard*

## SPECIFICATION FOR GAUGES FOR SERRATIONS

### PART II FOR GAUGING INTERNAL SERRATIONS

#### 0. FOREWORD

**0.1** This Indian Standard ( Part II ) was adopted by the Indian Standards Institution on 9 January 1969, after the draft finalized by the Transmission Devices Sectional Committee had been approved by the Mechanical Engineering Division Council.

**0.2** This standard has been prepared with a view to assisting the industry in making gauges corresponding to the system of limits and fits recommended in IS : 919-1963\* and also in order to help the industry in obtaining uniformity in design and variety reduction of gauges. Only the important dimensions of gauges have been covered in the standard, leaving the other details to the discretion of the manufacturer.

**0.3** For various symbols and definitions, which are similar to the symbols and definitions for splines, IS : 3665-1966† may be referred.

**0.4** In the preparation of this standard, considerable assistance has been derived from the following standards, issued by the Deutscher Normenausschuss:

DIN 2262 ( Blatt 1 )-1955 Kerbzahn — Gutlehrdorne für Kerbverzahnungen  $7 \times 8$  bis  $26 \times 30$  nach DIN 5481 Blatt 1 ( Sheet 1, 'GO' plug gauges for serrations  $7 \times 8$  to  $26 \times 30$  according to DIN 5481 Sheet 1 ).

DIN 2262 ( Blatt 2 )-1955 Kerbzahn — Gutlehrdorne für Kerbverzahnungen  $30 \times 34$  bis  $120 \times 125$  nach DIN 5481 Blatt 1 ( Sheet 2, 'GO' plug gauges for serrations  $30 \times 34$  to  $120 \times 125$  according to DIN 5481 Sheet 1 ).

DIN 2263 ( Blatt 1 )-1955 Kerbzahn — Ausschusslehrdorne für Kerbverzahnungen  $7 \times 8$  bis  $26 \times 30$  nach DIN 5481 Blatt 1 ( Sheet 1, 'NOT GO' plug gauges for serrations  $7 \times 8$  up to  $26 \times 30$  according to DIN 5481 Sheet 1 ).

DIN 2263 ( Blatt 2 )-1955 Kerbzahn — Ausschusslehrdorne für Kerbverzahnungen  $30 \times 34$  bis  $120 \times 125$  nach DIN 5481 Blatt 1

---

\*Recommendations for limits and fits for engineering ( revised ).

†Dimensions for involute sided splines.

( Sheet 2, ' NOT GO ' plug gauges for serrations  $30 \times 34$  to  $120 \times 125$  according to DIN 5481 Sheet 1 ).

DIN 5481 ( Blatt 2 )-1955 Kerbzahnnaben — und Kerbzahnwellen — Profile ( Kerbverzahnungen ) Lehrung der Kerbzahnnaben, Lehrenmasse ( Sheet 2, gauging of serrated hubs, gauge dimension ).

**0.5** For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test, shall be rounded off in accordance with IS : 2-1960\*. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

---

## **1. SCOPE**

**1.1** This standard covers the main dimensions for GO and NOT GO gauges for internal serrations according to IS : 3654-1966†.

## **2. TERMINOLOGY**

**2.0** For the purpose of this standard, the following definitions shall apply.

**2.1 GO Gauge** — The gauge used to check the limit of size which correspond to the maximum material condition that is the upper limit of a shaft or the lower limit of a hole.

**2.2 NOT GO Gauge** — The gauge used to check the limit of size which corresponds to the minimum material condition that is the lower limit of a shaft or the upper limit of a hole.

## **3. MATERIAL**

**3.1 Gauge Members** — The gauging members of gauges shall be made of suitable wear resisting steel such as C85 of IS<sub>1</sub> 1570-1961‡.

**3.2 Handles** — The handles for gauges shall be made of any suitable steel. For heavier plain plug gauges, the handles may be made of light metal alloys. Suitable non-metallic handles may also be provided in the case of smaller plain plug gauges.

## **4. DIMENSIONS AND TOLERANCES**

**4.1 GO Gauge** — The dimensions of GO gauges for internal serrations shall be as given in Tables 1 and 2.

**4.2 NOT GO Gauge** — The dimensions for NOT GO gauges for internal serrations shall be as given in Tables 3 and 4.

---

\*Rules for rounding off numerical values ( revised ).

†Dimensions for straight sided serrations.

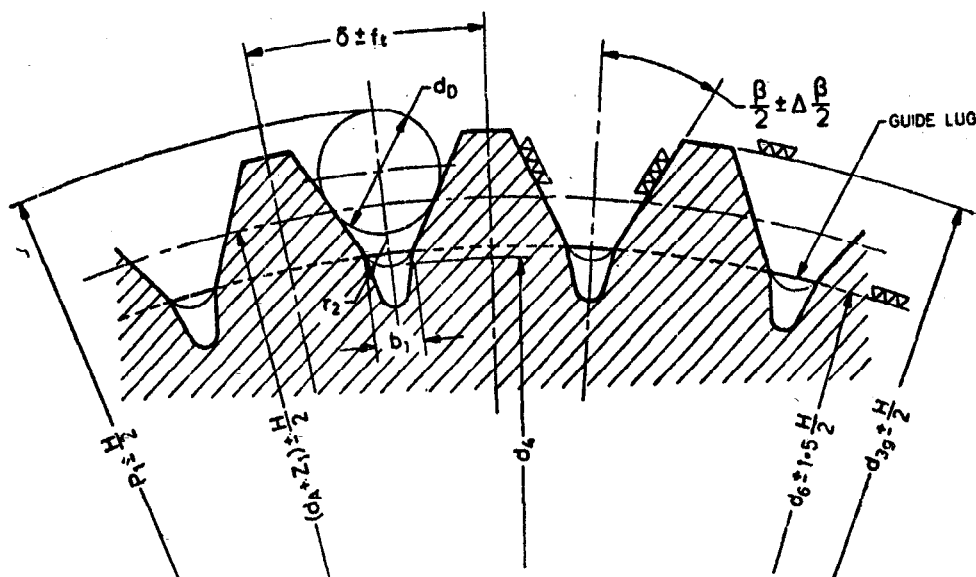
‡Schedules for wrought steels for general engineering purposes.



**TABLE 1. DIMENSIONS FOR GO GAUGES FOR INTERNAL SERRATIONS**

(Clauses 4.1 and 6.2)

All dimensions in millimetres.



NOMI- NAL SIZE	$b_1$ Max	$d_A$	$d_D$	$*d_{3g}$	$d_4$ Max	$d_6$	$\frac{H}{2}$ $\mu m$	$P_1$	$r_2$ Approx	$Z_1$ $\mu m$	NUMBER OF TEETH	$\frac{\beta}{2}$	$\Delta \frac{\beta}{2}$	$\delta$	$\pm f_t$ $\mu m$
7×8	—	7.500	0.486	7.82	6.91	7.1	5	8.224	0.08	8	28	30°	15'	12°51'26"	±3
8×10	—	9.000	0.583	9.81	8.26	8.3	5	9.867	0.08	8	28	30°	15'	12°51'26"	±3
10×12	0.25	11.000	0.665	11.71	10.20	10.3	5	11.989	0.10	8	30	30°	15'	12°	±3
12×14	0.25	13.000	0.760	13.91	12.06	12.2	5	14.114	0.10	8	31	30°	10'	11°36'46"	±4
15×17	0.30	16.000	0.907	16.91	14.91	15.1	5	17.349	0.15	9	32	30°	10'	11°15'	±4
17×20	0.35	18.500	1.016	19.70	17.37	17.5	5	19.990	0.20	9	33	30°	10'	10°54'33"	±4
21×24	0.5	22.000	1.173	23.60	20.76	21.0	6	23.747	0.25	11	34	30°	9'	10°35'18"	±5
26×30	0.6	28.000	1.431	29.70	26.40	26.7	6	30.129	0.3	11	35	30°	9'	10°17'9"	±5
30×34	0.7	32.000	1.612	33.69	30.38	30.7	6	34.397	0.4	11	36	30°	9'	10°	±5
36×40	0.7	38.000	1.862	39.59	35.95	36.2	9	40.744	0.4	22	37	30°	9'	9°43'47"	±5
40×44	0.8	42.000	2.004	43.68	39.72	40.2	9	44.991	0.4	22	38	30°	9'	9°28'25"	±6
45×50	0.8	47.500	2.209	49.68	44.97	45.2	9	50.755	0.4	22	39	30°	9'	9°13'51"	±6
50×55	0.9	52.500	2.380	54.56	49.72	50.2	10	56.053	0.4	25	40	30°	9'	9°	±6
55×60	1.0	57.500	2.483	59.66	54.76	55.2	10	61.207	0.5	25	42	30°	9'	8°34'17"	±6
60×65	1.0	62.536	2.851	64.66	59.44	60.2	10	66.807	0.5	25	41	31°30'	8'	8°46'50"	±8
65×70	1.2	67.500	2.707	69.64	64.35	65.2	10	71.490	0.5	25	45	29°30'	8'	8°	±8
70×75	1.2	72.432	2.699	74.64	69.38	70.2	10	76.467	0.5	25	48	30°	8'	7°30'	±8
75×80	1.2	77.407	2.722	79.64	74.35	75.2	10	81.462	0.5	25	51	30°30'	8'	7°3'32"	±8
80×85	1.2	82.420	2.644	84.62	79.28	80.2	12	86.305	0.5	28	55	29°	8'	6°32'44"	±10
85×90	1.2	87.390	2.654	89.62	84.31	85.2	12	91.345	0.5	28	58	29°30'	8'	6°12'25"	±10
90×95	1.2	92.400	2.695	94.62	89.33	90.2	12	96.408	0.5	28	61	30°	8'	5°54'6"	±10
95×100	1.2	97.580	2.744	99.62	94.25	95.2	12	101.623	0.5	28	65	29°	8'	5°32'18"	±10
100×105	1.2	102.610	2.791	104.59	99.35	100.2	12	106.770	0.5	28	68	29°30'	8'	5°17'39"	±12
105×110	1.2	107.675	2.870	109.59	104.33	105.2	12	111.951	0.5	28	71	30°	8'	5°4'14"	±12
110×115	1.2	112.340	2.582	114.59	109.05	110.2	12	116.134	0.5	28	75	28°30'	8'	4°48'	±12
115×120	1.2	117.400	2.644	119.59	114.23	115.2	12	121.329	0.5	28	78	29°	8'	4°36'55"	±12
120×125	1.2	122.500	2.738	124.54	119.30	120.2	13	126.570	0.5	32	81	29°30'	8'	4°26'40"	±15

\* $d_{3g}$  is the maximum value of major diameter  $d_3$  of the shaft (see IS : 3654-1966 Dimensions for straight sided serrations).

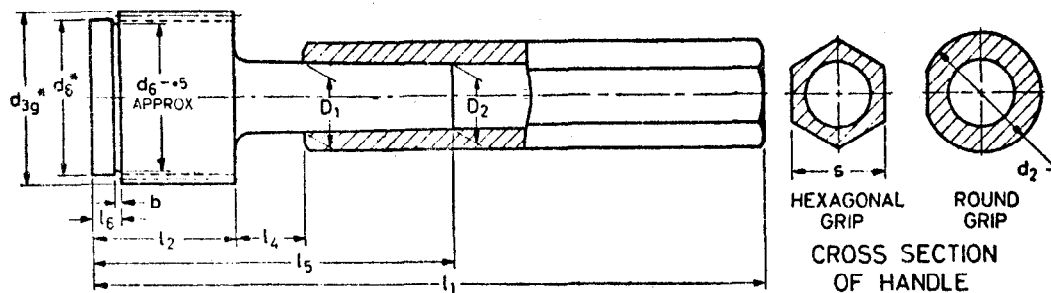
†Tolerance  $f_t$  for the pitch angle  $\delta$  has been given not as an angle but in linear units  $\mu m$ . This shall be considered as the tolerance for the pitch and applies over any number of pitches.

NOTE — Serrations up to nominal size 55×60 have 60° serration angle and serrations above the nominal size 55×60 have 55° serration angle.

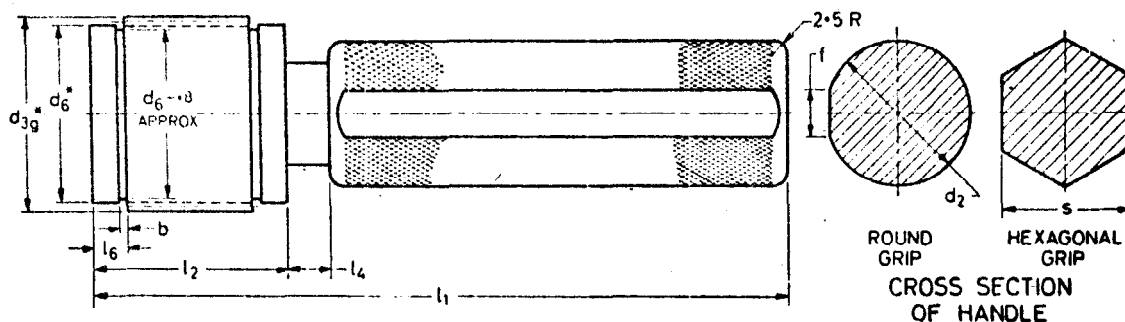
TABLE 2 OVERALL DIMENSIONS FOR GO GAUGES FOR INTERNAL SERRATIONS

( Clause 4.1 )

All dimensions in millimetres.



FOR SERRATIONS UP TO NOMINAL SIZE 26 x 30



FOR SERRATIONS ABOVE NOMINAL SIZE 26 x 30

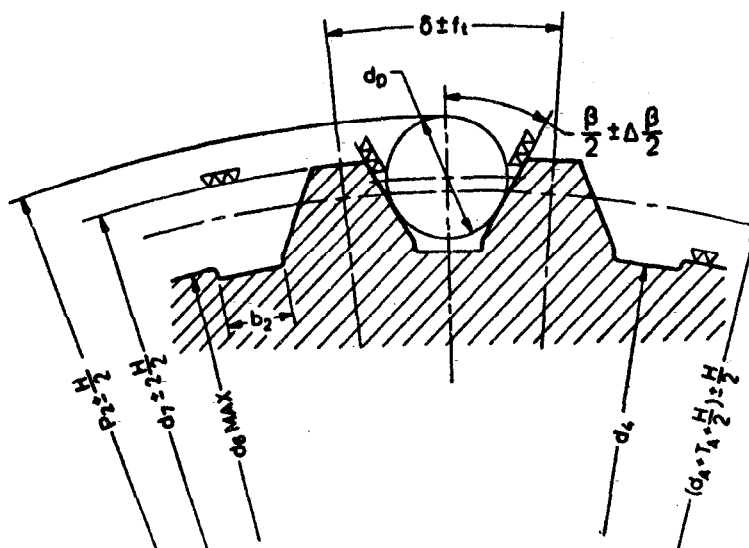
NOMINAL SIZE	$d_2$	$b$	$D_1$	$D_2$	$l_1$ Approx	$l_2$	$l_4$ Min	$l_5$	$l_6$	$f$	$s$
7 x 8	10	1.0	5.5	5.16	75.0	11.0	8.0	36.0	4	—	9
8 x 10	10	1.0	5.5	5.16	76.5	12.5	8.0	37.5	4	—	9
10 x 12	12	1.0	7.0	6.58	86.0	14	9.0	44.0	4	—	11
12 x 14	12	1.0	7.0	6.58	87.0	15	9.0	45	4	—	11
15 x 17	16	1.0	9.0	8.50	98.0	18	10.0	53	5	—	14
17 x 20	20	1.0	12	11.48	112.0	20	12.0	58	5	—	17
21 x 24	20	1.0	12	11.48	114.0	22	12.0	60	5	—	17
26 x 30	20	1.0	12	11.48	117.0	25	12.0	63	5	—	17
30 x 34	25	1.5	—	—	121.5	34	7.5	—	6	8.0	22
36 x 40	25	1.5	—	—	125.0	36	9.0	—	6	8.0	22
40 x 44	28	2	—	—	135.0	38	12.0	—	7	9.0	24
45 x 50	28	2	—	—	137.5	40	12.5	—	7	9.0	24
50 x 55	30	2	—	—	147.5	42	15.5	—	7	9.5	27
55 x 60	30	2	—	—	149.0	45	14.0	—	7	9.5	27
60 x 65	30	2	—	—	149.0	45	14.0	—	7	9.5	27
65 x 70	30	2	—	—	149.0	45	14.0	—	7	9.5	27
70 x 75	32	2	—	—	159.5	48	16.5	—	8	9.5	30
75 x 80	32	2	—	—	159.5	48	16.5	—	8	9.5	30
80 x 85	32	2	—	—	159.5	48	16.5	—	8	9.5	30
85 x 90	32	2	—	—	159.5	48	16.5	—	8	9.5	30
90 x 95	32	2	—	—	160.5	50	15.5	—	8	9.5	30
95 x 100	32	2	—	—	160.5	50	15.5	—	8	9.5	30
100 x 105	32	2	—	—	160.5	50	15.5	—	8	9.5	30
105 x 110	32	2	—	—	160.5	50	15.5	—	8	9.5	30
110 x 115	32	2	—	—	160.5	50	15.5	—	8	9.5	30
115 x 120	32	2	—	—	160.5	50	15.5	—	8	9.5	30
120 x 125	32	2	—	—	160.5	50	15.5	—	8	9.5	30

\*For values of  $d_{3g}$  and  $d_6$  see Table 1.

**TABLE 3 DIMENSIONS FOR NOT GO GAUGES FOR INTERNAL SERRATIONS**

(Clauses 4.2 and 6.2)

All dimensions in millimetres.



Number of serrations situated opposite:

Each two serrations for even number of serrations.

Two and three serrations for odd number of serrations.

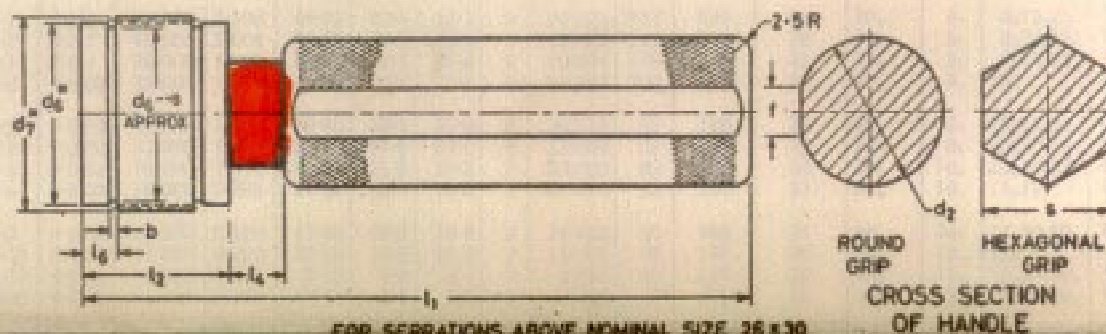
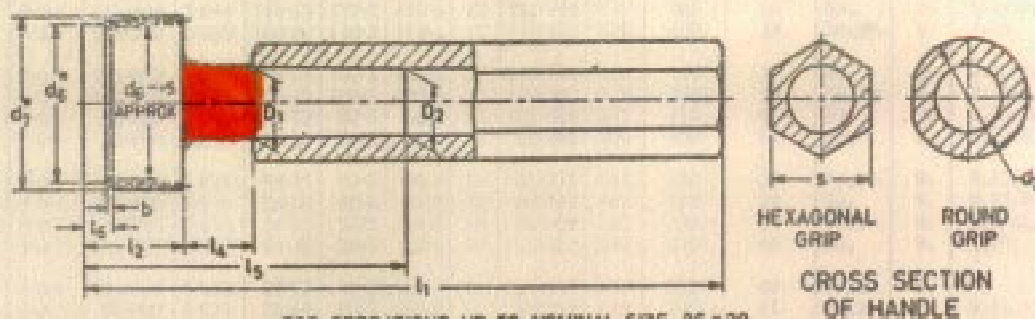
NOMINAL SIZE	b <sub>2</sub>		d <sub>A</sub>	d <sub>D</sub>	d <sub>4</sub> Max	d <sub>6</sub>	d <sub>7</sub>	H/2 μm	P <sub>2</sub>	T <sub>A</sub> μm		NUMBER OF TEETH	β/2	Δ β/2	δ	f <sub>1</sub> μm
	Nom	Tol								Fine	Coarse					
7×8	0.20	+0.05	7.500	0.486	6.91	7.1	7.8	5	8.278	63	126	28	30°	15'	12°51'26"	± 3
8×10	0.25	+0.05	9.000	0.583	8.26	8.3	9.5	5	9.923	65	130	28	30°	15'	12°51'26"	± 3
10×12	0.25	+0.05	11.000	0.665	10.20	10.3	11.5	5	12.048	68	136	30	30°	15'	12°	± 3
12×14	0.3	+0.05	13.000	0.760	12.06	12.2	13.6	5	14.175	70	140	31	30°	10'	11°36'46"	± 4
15×17	0.4	+0.05	16.000	0.907	14.91	15.1	16.6	5	17.414	75	150	32	30°	10'	11°15'	± 4
17×20	0.5	+0.05	18.500	1.016	17.37	17.5	19.2	5	20.060	80	160	33	30°	10'	10°54'33"	± 4
21×24	0.5	+0.05	22.000	1.173	20.76	21.0	23.0	6	23.820	85	170	34	30°	9'	10°35'18"	± 5
26×30	0.7	+0.05	28.000	1.451	26.40	26.7	29.0	6	30.212	95	190	35	30°	9'	10°17'9"	± 5
30×34	0.9	+0.05	32.000	1.612	30.38	30.7	32.9	6	34.485	100	200	36	30°	9'	10°	± 5
36×40	1.1	+0.1	38.000	1.862	35.95	36.2	38.8	9	40.834	110	220	37	30°	9'	9°43'47"	± 5
40×44	1.1	+0.1	42.000	2.004	39.72	40.2	42.8	9	45.085	115	230	38	30°	9'	9°28'25"	± 6
45×50	1.1	+0.1	47.500	2.209	44.97	45.2	48.7	9	50.859	125	250	39	30°	9'	9°13'51"	± 6
50×55	1.5	+0.1	52.500	2.380	49.72	50.2	53.6	10	56.164	135	270	40	30°	9'	9°	± 6
55×60	1.5	+0.1	57.500	2.483	54.76	55.2	58.6	10	61.324	140	280	42	30°	9'	8°34'17"	± 6
60×65	1.6	+0.1	62.536	2.851	59.44	60.2	63.6	10	66.933	150	300	41	31°30'	8'	8°46'50"	± 8
65×70	1.6	+0.1	67.500	2.707	64.35	65.2	68.6	10	71.626	160	320	45	29°30'	8'	8°	± 8
70×75	1.6	+0.1	72.432	2.699	69.38	70.2	73.6	10	76.609	165	330	48	30°	8'	7°30'	± 8
75×80	1.6	+0.1	77.407	2.722	74.35	75.2	78.6	10	81.604	175	350	51	30°30'	8'	7°3'32"	± 8
80×85	1.6	+0.1	82.420	2.644	79.28	80.2	83.6	12	86.465	185	370	55	29°	8'	6°32'44"	± 10
85×90	1.6	+0.1	87.390	2.654	84.31	85.2	88.6	12	91.511	190	380	58	29°30'	8'	6°12'25"	± 10
90×95	1.6	+0.1	92.400	2.695	89.33	90.2	93.6	12	96.584	200	400	61	30°	8'	5°54'6"	± 10
95×100	1.6	+0.1	97.580	2.744	94.25	95.2	98.6	12	101.804	205	410	65	29°	8'	5°32'18"	± 10
100×105	1.6	+0.1	102.610	2.791	99.35	100.2	103.6	12	106.960	215	430	68	29°30'	8'	5°17'39"	± 12
105×110	1.6	+0.1	107.675	2.870	104.33	105.2	108.7	12	112.147	220	440	71	30°	8'	5°4'14"	± 12
110×115	1.6	+0.1	112.340	2.582	109.05	110.2	113.7	12	116.339	230	460	75	28°30'	8'	4°48'	± 12
115×120	1.6	+0.1	117.400	2.644	114.23	115.2	118.7	12	121.544	240	480	78	29°	8'	4°36'55"	± 12
120×125	1.6	+0.1	122.500	2.738	119.30	120.2	123.7	13	126.793	250	500	81	29°30'	8'	4°26'40"	± 15

NOTE — Serrations up to nominal size 55 × 60 have 60° serration angle and serrations above the nominal size 55 × 60 have 55° serration angle.

TABLE 4 OVERALL DIMENSIONS FOR NOT GO GAUGES FOR INTERNAL SERRATIONS

(Class 4.3)

All dimensions in millimetres.



NOMINAL SIZE	$d_1$	$b$	$D_1$	$D_2$	$l_1$ Approx	$l_2$	$l_3$ Min	$l_4$	$l_5$	$f$	$s$
7 x 8	10	1.0	5.5	5.16	73.0	9	8.0	34	4	—	9
8 x 10	10	1.0	5.5	5.16	74.0	10	8.0	35	4	—	9
10 x 12	12	1.0	7.0	6.58	83.0	11	9.0	41	4	—	11
12 x 14	12	1.0	7.0	6.58	84.0	12	9.0	42	4	—	11
15 x 17	16	1.0	9.0	8.50	94.0	14	10.0	49	5	—	14
17 x 20	20	1.0	12	11.48	107.0	15	12.0	53	5	—	17
21 x 24	20	1.0	12	11.48	107.0	15	12.0	53	5	—	17
26 x 30	20	1.0	12	11.48	109.0	17	12.0	55	5	—	17
30 x 34	25	1.5	—	—	114.5	25	9.5	—	6	8.0	22
36 x 40	25	1.5	—	—	118.0	27	11.0	—	6	8.0	22
40 x 44	28	2	—	—	127.5	28	14.5	—	7	9.0	24
45 x 50	28	2	—	—	129.5	30	13.5	—	7	9.0	24
50 x 55	30	2	—	—	137.5	30	17.5	—	7	9.5	27
55 x 60	30	2	—	—	139.5	34	15.5	—	7	9.5	27
60 x 65	30	2	—	—	139.5	34	15.5	—	7	9.5	27
65 x 70	30	2	—	—	139.5	34	15.5	—	7	9.5	27
70 x 75	32	2	—	—	149.5	36	18.5	—	8	9.5	30
75 x 80	32	2	—	—	149.5	36	18.5	—	8	9.5	30
80 x 85	32	2	—	—	149.5	36	18.5	—	8	9.5	30
85 x 90	32	2	—	—	149.5	36	18.5	—	8	9.5	30
90 x 95	32	2	—	—	150.5	38	17.5	—	8	9.5	30
95 x 100	32	2	—	—	150.5	38	17.5	—	8	9.5	30
100 x 105	32	2	—	—	150.5	38	17.5	—	8	9.5	30
105 x 110	32	2	—	—	150.5	38	17.5	—	8	9.5	30
110 x 115	32	2	—	—	150.5	38	17.5	—	8	9.5	30
115 x 120	32	2	—	—	150.5	38	17.5	—	8	9.5	30
120 x 125	32	2	—	—	150.5	38	17.5	—	8	9.5	30

\*For values of  $d_6$  and  $d_7$  see Table 3.

## 5. DESIGNATION

**5.1** The gauges shall be designated by GO or NOT GO as applicable, the nominal size of the internal serrations for which the gauges are used and the number of this standard.

*Example:*

A GO gauge for internal serrations of nominal size  $10 \times 12$  shall be designated as:

GO Gauge, Internal Serrations  $10 \times 12$  — IS : 4966 ( Part II )

## 6. OTHER REQUIREMENTS

**6.1** The gauging surfaces of gauges shall be hardened to not less than 750 HV ( see IS : 1501-1959\* ) or its equivalent on other scale.

**6.2** The surface finish of the gauging surfaces shall be in accordance with the values for the corresponding symbols as given in IS : 3073-1967† ( see Tables 1 and 3 ).

## 7. MARKING

**7.1** The gauges shall be marked with the following details:

- a) Designation, and
- b) Manufacturer's name or trade-mark.

**7.1.1** The gauges may also be marked with the ISI Certification Mark.

**NOTE** — The use of the ISI Certification Mark is governed by the provisions of the Indian Standards Institution ( Certification Marks ) Act and the Rules and Regulations made thereunder. The ISI Mark on products covered by an Indian Standard conveys the assurance that they have been produced to comply with the requirements of that standard under a well-defined system of inspection, testing and quality control which is devised and supervised by ISI and operated by the producer. ISI marked products are also continuously checked by ISI for conformity to that standard as a further safeguard. Details of conditions under which a licence for the use of the ISI Certification Mark may be granted to manufacturers or processors, may be obtained from the Indian Standards Institution.

## 8. PACKING

**8.1** The gauges shall be suitably protected against climatic conditions by an application of suitable anti-corrosive coating. The gauges may then be packed in suitable cases to prevent damage in transit.

\*Method for Vickers hardness test for steel. ( Since revised ).

†Assessment of surface roughness.

# BUREAU OF INDIAN STANDARDS

## Headquarters:

Manak Bhavan, 9 Bahadur Shah Zafar Marg, NEW DELHI 110002

Telephones : 331 01 31, 331 13 75

Telegrams : Manaksanstha  
( Common to all offices )

## Regional Offices:

	Telephones
Central : Manak Bhavan, 9 Bahadur Shah Zafar Marg, NEW DELHI-110002	[331 01 31 331 13 75]
*Eastern : 1/14 C.I.T. Scheme VII M, V. I. P. Road, Maniktola, CALCUTTA 700054	36 24 99
Northern : SCO 445-446, Sector 35-C, CHANDIGARH 160036	[2 18 43 3 16 41]
Southern : C. I. T. Campus, MADRAS 600113	{41 24 42 41 25 19 41 29 16}
†Western : Manakalaya, E9 MIDC, Marol, Andheri (East), BOMBAY 400093	6 32 92 95

## Branch Offices:

'Pushpak' Nurmohamed Shaikh Marg, Khanpur, AHMEDABAD 380001	[2 63 48 2 63 49]
‡Peenya Industrial Area, 1st Stage, Bangalore Tumkur Road BANGALORE 560058	[38 49 55 38 49 56]
Gangotri Complex, 5th Floor, Bhadbhada Road, T. T. Nagar, BHOPAL 462003	6 67 16
*Plot No. 82/83, Lewis Road, BHUBANESHWAR 751002	5 36 27
53/5, Ward No. 29, R. G. Barua Road, 5th Byelane, GUWAHATI 781003	3 31 77
5-8-56C L. N. Gupta Marg ( Nampally Station Road ), HYDERABAD 500001	23 10 83
R14 Yudhister Marg, C Scheme, JAIPUR 302005	[6 34 71 6 98 32]
117/418 B Sarvodaya Nagar, KANPUR 208005	[21 68 76 21 82 92]
Patliputra Industrial Estate, PATNA 800013	6 23 05
T C. No. 14/1421, University P.O., Palayam TRIVANDRUM 695035	[6 21 04 6 21 17]

## Inspection Office (With Sale Point) :

Pushpanjali, 1st Floor, 205-A West High Court Road, Shankar Nagar Square, NAGPUR 440010	2 51 71
Institution of Engineers ( India ) Building, 1332 Shivaji Nagar, PUNE 411005	5 24 35

*Sales Office in Calcutta is at 5 Chowringhee Approach, P.O. Princep Street, Calcutta 700072	27 68 00
†Sales Office in Bombay is at Novelty Chambers, Grant Road, Bombay 400007	89 65 28
‡Sales Office in Bangalore is at Unity Building, Narasimharaja Square, Bangalore 560002	22 36 71